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GEI

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November 13, 2006
Project 04516-2



Ms. Irene M. Dale
Environmental Engineer
Bureau of Waste Site Cleanup
Department of Environmental Protection
205B Lowell Street
Wilmington, MA 01887

Geotechnical
Environmental and
Water Resources
Engineering

RECEIVED

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DEP
NORTHEAST REGIONAL OFFICE

Dear Ms. Dale:

Re: Immediate Response Action Plan
50 Tufts Street
Somerville, MA
RTN 3-26114

On behalf of the UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, GEI Consultants, Inc. prepared this Immediate Response Action (IRA) Plan in response to the letter dated October 11, 2006, from Ms. Iris Davis of the Massachusetts Department of Environmental Protection (DEP) to UniFirst (Retraction Denial Letter). Under separate cover, in a letter dated November 10, 2006, Mr. Brian Keegan, Senior Environmental Manager of UniFirst disputes DEP's conclusions and determinations in its Retraction Denial Letter.

GEI and UniFirst initially reported a potential Imminent Hazard based on the detection of elevated concentrations of tetrachloroethylene (also called perchloroethylene [PCE]) in indoor air at 23 and 27 Tufts Street. The potential Imminent Hazard condition was identified during indoor air testing associated with the IRA (Release Tracking Number [RTN] 3-23246) for a release of chlorinated volatile organic compounds (VOCs) at 50 Tufts Street in Somerville, Massachusetts (the Property). The concentrations of PCE measured in indoor air at 23 and 27 Tufts Street in June 2006 were anomalously high, as compared with previous indoor air sampling conducted in the same and other nearby homes.

The original IRA Transmittal Form (BWSC105) was submitted via eDEP on November 13, 2006, and a copy is included in Attachment A.

1. CONTACT INFORMATION

Entity Undertaking the IRA
Brian Keegan
Senior Engineering Manager
UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887
978.658.8888 ext 645

Licensed Site Professional
Ileen S. Gladstone, P.E., LSP
Vice President
GEI Consultants, Inc.
1021 Main Street
Winchester, MA 01890
781.721.4012
LSP License: 9719

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2. BACKGROUND

2.1. Release Description

Based on the results of assessments conducted to date, the disposal site is comprised of the Property and portions of properties located east of the Property across Tufts Street. Chlorinated VOCs, particularly PCE, have been measured in soil, groundwater, and indoor air at the site. The Property is located in a residential and commercial neighborhood in East Somerville. The site location is shown in Figure 1 and a Site Plan in Figure 2

Chlorinated VOCs have been detected in groundwater samples collected from monitoring wells located east of 50 Tufts Street (the Property) across Tufts Street. In 2005, DEP conducted indoor air testing for PCE and other VOCs at residences located across from 50 Tufts Street including 9, 11/13, 17, 19, 23, 25 and 27 Tufts Street. DEP sent a letter to each homeowner summarizing the results of its testing and reported that the PCE detected during the indoor air testing was below DEP's "threshold limit" for "significant risk of harm to health over a short period of time" and "below the levels DEP typically finds in homes."

UniFirst initiated a quarterly indoor air monitoring program at the same homes along Tufts Street in March 2006, and collected a second round of indoor air samples in June 2006. In June 2006, GEI attempted to obtain access to collect indoor air samples from the basement and first floor living areas of the residences at 9, 11/13, 17, 19, 23, 25 and 27 Tufts Street. GEI collected samples on June 28 and 29, 2006 at 11/13, 19, 23 and 27 Tufts Street; however, we were unable to obtain access at that time to 9, 17, and 25 Tufts Street.

Higher concentrations of PCE in indoor air were detected in the first floors at 11/13, 19, 23, and 27 Tufts Street and in the basements at 11/13, 23 and 27 Tufts Street in the June 2006 samples than those detected in March 2006. At 11/13 and 19 Tufts Street, the differences in concentrations from March 2006 to June 2006 were not substantial. However, PCE concentrations in the basement samples of 23 and 27 Tufts Street and the first floor sample at 23 Tufts Street were significantly higher than previously measured.

2.2. Imminent Hazard Reporting

UniFirst engaged AMEC Earth & Environmental of Westford, Massachusetts to evaluate the potential for an Imminent Hazard based on the indoor air concentrations measured in June 2006.

AMEC evaluated the noncarcinogenic and carcinogenic risks at each residence based on a five-year exposure to the indoor air concentrations measured in June 2006. AMEC's approach to this initial Imminent Hazard Evaluation was very conservative, since it assumed exposure for five years to the maximum concentration detected, and not an average of all measured concentrations. As AMEC states in its report, pending the results of confirmatory sampling, and in the context of assessing the potential applicability of the reporting requirements under 310 CMR 40.0311(7), AMEC assumed that receptors might be exposed to the June 2006 concentrations for a full five-year period. The initial assumption that receptors would be exposed to the June 2006 concentrations daily for five full years was not, in fact, borne out by the confirmatory sampling.

An Imminent Hazard exists if the estimated Excess Lifetime Cancer Risk exceeds 1/100,000. For five years (without any remedial actions), the estimated ELCR for the residence at 23 Tufts Street

was greater than 1/100,000 and equal to 1/100,000 for 27 Tufts Street. The Hazard Index for both properties was less than 10.

Based on an ELCR greater than 1/100,000 at 23 Tufts Street, Mr. Brian Keegan, Senior Environmental Manager at UniFirst and Ms. Ileen Gladstone, LSP of GEI reported the potential for an Imminent Hazard to Mr. Kyle MacAfee of the DEP on August 1, 2006. DEP assigned RTN 3-26114 to the release. In addition to further evaluating conditions at 23 Tufts Street, UniFirst proposed to also evaluate conditions at 27 Tufts Street.

At that time, Mr. MacAfee verbally approved an IRA Plan to collect additional indoor air samples at 23 and 27 Tufts Street to evaluate if in fact an Imminent Hazard actually existed in the homes. Mr. MacAfee also approved the installation of indoor air purifiers in the basements of the homes if the higher concentrations were persistent.

GEI collected a second round of indoor air samples at 23 and 27 Tufts Street on August 3, 2006. PCE concentrations detected in samples collected from 23 and 27 Tufts Street in August 2006 were significantly lower than those detected in samples collected in June 2006.

2.3. Imminent Hazard Retraction

AMEC updated the Imminent Hazard Evaluation for 23 and 27 Tufts Street incorporating the August 2006 data. AMEC evaluated the noncarcinogenic and carcinogenic risks for the residents based on exposure to the average indoor air concentrations of all data collected at each residence, not just the August round of sampling results. In addition, after giving primary consideration to DEP recommended cancer slope factors, AMEC used widely accepted alternative values for cancer slope factors to evaluate the carcinogenic risks.

An Imminent Hazard exists if the estimated ELCR exceeds 1/100,000. For five years (without any remedial actions), AMEC estimated the ELCR for the residence at 23 Tufts Street was equal to 1/100,000. For 27 Tufts Street, the ELCR is less than 1/100,000. The Hazard Index for all properties is less than 10.

Based on this evaluation, using current scientific methods and recognizing that the single high concentration of PCE that triggered the original Imminent Hazard notification was not persistent, we concluded that an Imminent Hazard does not exist at 23 or 27 Tufts Street; that as provided for in 310 CMR 30.0335 (3), "the subject release did not meet any of the reporting thresholds specified in 310 CMR 0300;" and the release should be retracted. On September 21, 2006, we therefore submitted an Imminent Hazard Retraction to DEP.

On October 11, 2006, DEP sent UniFirst a Denial of Notification Retraction stating that we provided "no information or data to support the fact that a reportable condition did not actually exist." The DEP also established the Interim Deadline of November 10, 2006 for UniFirst to confirm the completion of the initially approved IRA and provide the Release Notification and IRA Plan associated with RTN 3-26114. We have prepared this IRA Plan in response to DEP's request.

2.4 Installation of Air Purifiers

UniFirst submitted an IRA Plan Modification No. 2 to DEP under RTN 3-23246 on September 21, 2006. At that time, UniFirst confirmed that it was moving forward voluntarily with the installation of AllerAir 5000 Vocab air purifier designed for the removal of VOCs as a mitigative measure.

Excerpts from the manufacturer's literature describing the AllerAir 5000 Vocab were provided in the IRA Plan Modification No. 2. Rather than limiting the availability of air purifiers to two residences, however, UniFirst offered to make them available to each residential property owner within the site. Thus, the measures undertaken voluntarily by UniFirst included installing air purifiers at 9, 11/13, 17, 23, 25, and 27 Tufts Street immediately following the indoor air sampling on September 28 or October 2, 2006. The owner of 19 Tufts Street is still considering installation of the air purifier.

3. IRA OBJECTIVES, PLAN, AND SCHEDULE (310 CMR 40.0424[1][e])

3.1. IRA Objectives

The objectives of the IRA are to:

- Collect additional air samples at 23 and 27 Tufts Street to evaluate indoor air for the presence of chlorinated VOCs, and continue to conduct air testing as part of RTN 3-23246.
- Document the air purifiers installed in the basements at 23 and 27 Tufts Street as part of RTN 2-23246.

3.2. IRA Activities

GEI collected a second round of indoor air samples at 23 and 27 Tufts Street on August 3, 2006. The results are summarized on Table 1 and the laboratory data reports are presented in the Interim IRA Status Report No. 2 and IRA Modification (RTN 3-23246) submitted to DEP on November 13, 2006.

As proposed in IRA Modification No. 2 for RTN 3- 23246, we installed AllerAir 5000 Vocab air purifiers in the basements at 23 and 27 Tufts Street.

4. REMEDIATION WASTE MANAGEMENT

As originally described in IRA Modification No. 2, the AllerAir 5000 Vocab includes two types of filters (particulate and activated carbon) that require periodic replacement. The particulate pre-filter will need changing approximately quarterly, while the carbon filters will need changing on an approximately annual basis. The carbon filters that adsorb VOCs will be managed as remediation waste under RTN 3-23246. The cost for filter replacement and disposal will be borne by UniFirst while these air purifiers are being used as a temporary mitigative measure.

5. ENVIRONMENTAL MONITORING PLAN AND PERMITS

As originally described in IRA Modification No. 2, the fourth round of indoor air sampling, currently scheduled for December 2006, will be performed to confirm operation of the AllerAir 5000 Vocab. No permits are required to install the air purifiers. .

6. PUBLIC NOTICE REQUIREMENTS

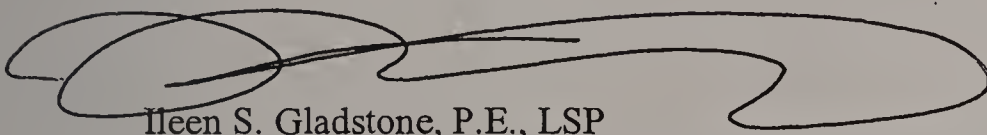
In the event of an Imminent Hazard condition, which UniFirst disputes, separate notifications are required under 310 CMR 40.1403, concerning the implementation of an IRA. To comply with the

Retraction Denial Letter, we sent notifications to the Board of Health and Chief Municipal Officer for the city of Somerville. Copies of the letters are in Appendix B.

Please contact me at 781.721.4012 or igladstone@geiconsultants.com if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.

A handwritten signature in dark ink, appearing to read 'Helen S. Gladstone', with a large, sweeping flourish extending to the right.

Helen S. Gladstone, P.E., LSP
Vice President

MCE/ISG:jah

Attachments

c: Brian Keegan, UniFirst Corporation
Stephen Aquilino, UniFirst Corporation
Vithal Deshpande, City of Somerville

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Table 1
Chemical Testing Results - Indoor Air Samples
50 Tufts Street
Somerville, MA

Sample Location: Sample Name: Sample Date: Collected By: Units:				27 Tufts St., Basement								27 Tufts St., 1st floor							
				IA-10 2/23/05 Shaw Environmental		045160-27Tufts-B 3/23/06 GEI Consultants, Inc.		045160-27Tufts-B 6/28/06 GEI Consultants, Inc.		045160-27Tufts-B 8/3/06 GEI Consultants, Inc.		IA-9 2/23/05 Shaw Environmental		045160-27Tufts-1 3/23/06 GEI Consultants, Inc.		045160-27Tufts-1 6/28/06 GEI Consultants, Inc.		045160-27Tufts-1 8/3/06 GEI Consultants, Inc.	
				ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV
				DEP Background Concentrations in Indoor Air															
Analyte	Method			ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV
Volatile Organic Compounds (VOCs)	TO-15																		
Carbon tetrachloride		1	0.16	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	<0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.2
Chloroform		3	0.6	< 0.98	< 0.20	< 0.98	< 0.20	< 0.98	< 0.20	NT	NT	< 0.98	< 0.20	< 0.98	< 0.20	< 0.98	< 0.20	NT	NT
Chloromethane		NS	NS	0.6	0.29	2.9 L	1.4 L	1.3	0.65	NT	NT	1.2	0.59	110 L	53.5 L	1.6	0.79	NT	NT
1,2-Dichloroethane		NS	NS	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	<0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Methylene chloride		10	2.83	0.49 J	0.14 J	< 4.2 M	< 1.2 M	< 2.1 M	< 0.6 M	NT	NT	0.52 J	0.15 J	< 2.0 M	< 0.59 M	< 2.2 M	< 0.63 M	NT	NT
Tetrachloroethylene (PCE)		11	1.6	< 1.4	< 0.20	< 1.4	< 0.20	117	17.3	1.6	0.23	< 1.4	< 0.20	< 1.4	< 0.20	3.8	0.56	0.81 J	0.12 J
1,1,1-Trichloroethane		30	5.41	< 1.1	< 0.20	< 1.1	< 0.20	1.0 J	0.19 J	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		5	0.92	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

- General Notes:**
1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
 2. ug/m³ = micrograms per cubic meter.
 3. ppbV = parts per billion by volume.
 4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table," dated August 2002.
 5. NS = No DEP Background Concentration has been established for this compound.
 6. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
 7. Results in bold exceed the DEP Background Concentration in Indoor Air.
 8. NT = Not tested.

- Qualifying Notes:**
- J The reported result is below the laboratory reporting limit and is estimated.
 - L The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
 - M The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 1
Chemical Testing Results - Indoor Air Samples
50 Tufts Street
Somerville, MA

Sample Location: Sample Name: Sample Date: Collected By: Units:				23 Tufts St., Basement								23 Tufts St., 1st floor							
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				ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV
				DEP Background Concentrations in Indoor Air															
Analyte	Method			ug/m ³	ppbV														
Volatile Organic Compounds (VOCs)	TO-15																		
Carbon tetrachloride		1	0.16	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20	< 1.3	< 0.20	0.94 J	0.15 J	0.69 J	0.11 J
Chloroform		3	0.6	0.88 J	0.18 J	< 0.98	< 0.20	3.7	0.76	NT	NT	0.63 J	0.13 J	< 0.98	< 0.20	13	2.7	NT	NT
Chloromethane		NS	NS	1.1	0.54	1.6 L	0.79 L	1.9	0.91	NT	NT	0.97	0.47	1.7 L	0.82 L	1.6	0.78	NT	NT
1,2-Dichloroethane		NS	NS	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Methylene chloride		10	2.83	0.49 J	0.14 J	< 2.0 M	< 0.57 M	< 2.4 M	< 0.7 M	NT	NT	0.52 J	0.15 J	< 2.7 M	< 0.77 M	396 L	114 L	NT	NT
Tetrachloroethylene (PCE)		11	1.6	2.3	0.34	2.8	0.42	125	18.5	10	1.5	1.6	0.23	< 1.4	< 0.20	94.9	14.0	9.5	1.4
1,1,1-Trichloroethane		30	5.41	< 1.1	< 0.20	< 1.1	< 0.20	1.5	0.28	0.60 J	0.11 J	< 1.1	< 0.20	< 1.1	< 0.20	1.0 J	0.19 J	< 1.1	< 0.20
Trichloroethylene (TCE)		5	0.92	< 1.1	< 0.20	< 1.1	< 0.20	1.0 J	0.19 J	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	0.64 J	0.12 J	< 1.1	< 0.20

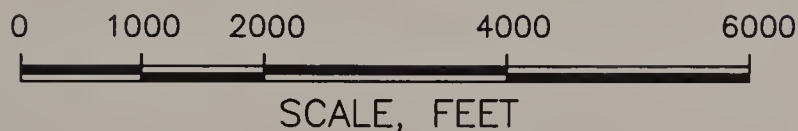
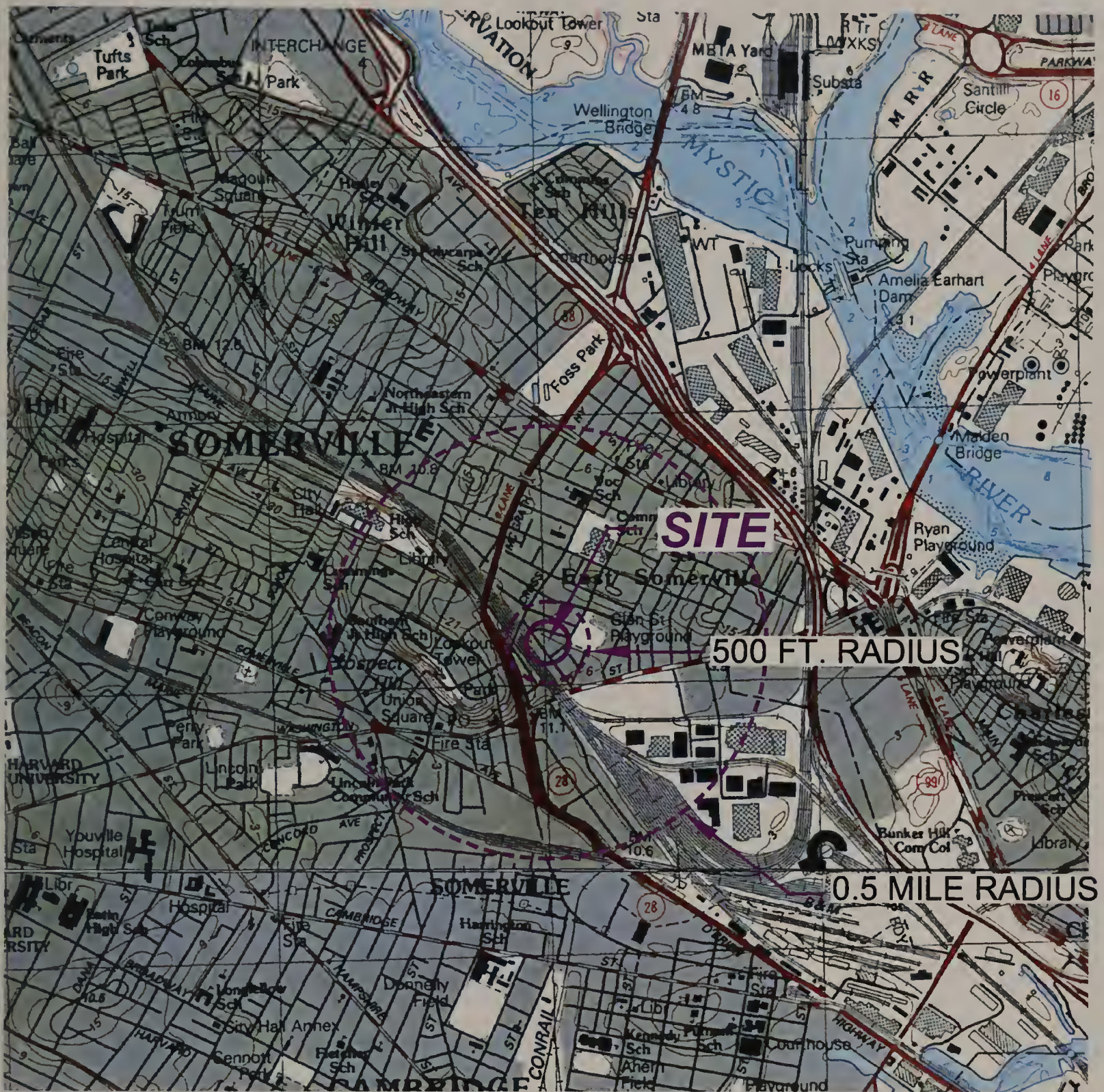
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This Image provided by MassGIS is taken from
U.S.G.S. Topographic 7.5 X 15 Minute Series
Boston North, MA Quadrangle, 1985.
Datum is National Geodetic Vertical Datum (NGVD).
Contour Interval is 3 Meters.

Immediate Response Action Plan RTN 3-26114
50 Tufts Street
Somerville, Massachusetts
UniFirst Corporation
Wilmington, Massachusetts



Project 04516-2

SITE LOCATION MAP

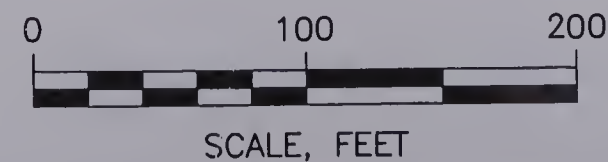
November 2006

Fig. 1



NOTES:

1. THIS PLAN WAS DERIVED FROM CITY OF SOMERVILLE ASSESSORS MAP NO. 93 AND 104, DATED JANUARY 3, 2001.



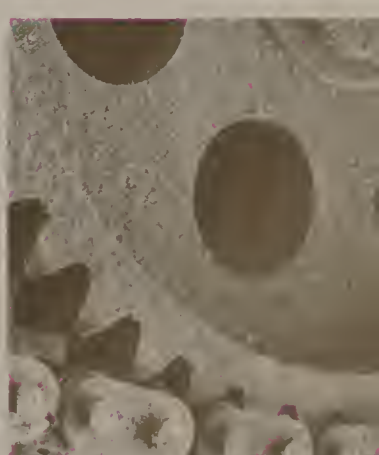
Immediate Response Action Plan RTN 3-26114 50 Tufts Street Somerville, Massachusetts UniFirst Corporation Wilmington, Massachusetts

 GEI Consultants Project 04516-2
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SITE PLAN November 2006 Fig. 2



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ATTACHMENT A

Immediate Response Action (IRA) Transmittal Form
(BWSC105)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

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26114

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: **NO LOCATION AID**
2. Street Address: **50 TUFTS ST**
3. City/Town: **SOMERVILLE** 4. ZIP Code:
5. UTM Coordinates: a. UTM N: **4694322** b. UTM E: **328049**
- ☐ 6. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.
☐ a. Tier IA ☐ b. Tier IB ☐ c. Tier IC ☐ d. Tier II
- ☐ 7. Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114. Specify Program (check one):
☐ a. CERCLA ☐ b. HSWA Corrective Action ☐ c. Solid Waste Management
☐ d. RCRA State Program (21C Facilities)

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial IRA Written Plan (if previously submitted):
(mm/dd/yyyy)
- ☒ 2. Submit an **Initial IRA Plan**.
- ☐ 3. Submit a **Modified IRA Plan** of a previously submitted written IRA Plan.
- ☐ 4. Submit an **Imminent Hazard Evaluation**. (check one)
☐ a. An Imminent Hazard exists in connection with this Release or Threat of Release.
☐ b. An Imminent Hazard does not exist in connection with this Release or Threat of Release.
☐ c. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
☐ d. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.
- ☐ 5. Submit a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard**.
- ☐ 6. Submit an **IRA Status Report**.
- ☐ 7. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)
a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report
b. Frequency of Submittal: (check all that apply)
☐ i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.
☐ ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.
☐ iii. A Remedial Monitoring Report(s) submitted concurrent with a IRA Status Report.
c. Number of Remedial Systems and/or Monitoring Programs:
- A separate BWSC105A, IRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

-

26114

B. THIS FORM IS BEING USED TO (cont.): (check all that apply)

☐ 8. Submit an **IRA Completion Statement**.

☐ a. Check here if future response actions addressing this Release or Threat of Release notification condition will be conducted as part of the Response Actions planned or ongoing at a Site that has already been Tier Classified under a different Release Tracking Number (RTN) . When linking RTNs, rescoring via the NRS is required if there is a reasonable likelihood that the addition of the new RTN(s) would change the classification of the site.

b. Provide Release Tracking Number of Tier Classified Site (Primary RTN):

-

These additional response actions must occur according to the deadlines applicable to the Primary RTN. Use the Primary RTN when making all future submittals for the site unless specifically relating to this Immediate Response Action.

☐ 9. Submit a **Revised IRA Completion Statement**.

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

1. Identify Media Impacted and Receptors Affected: (check all that apply)

- ☒ a. Air ☒ b. Basement ☒ c. Critical Exposure Pathway ☐ d. Groundwater ☒ e. Residence
☐ f. Paved Surface ☐ g. Private Well ☐ h. Public Water Supply ☐ i. School ☐ j. Sediments
☐ k. Soil ☐ l. Storm Drain ☐ m. Surface Water ☐ n. Unknown ☐ o. Wetland ☐ p. Zone 2
☐ q. Others Specify: _____

2. Identify Oils and Hazardous Materials Released: (check all that apply)

- ☐ a. Oils ☒ b. Chlorinated Solvents ☐ c. Heavy Metals
☐ d. Others Specify: _____

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

- | | |
|--|---|
| <input checked="" type="checkbox"/> 1. Assessment and/or Monitoring Only | <input type="checkbox"/> 2. Temporary Covers or Caps |
| <input type="checkbox"/> 3. Deployment of Absorbent or Containment Materials | <input type="checkbox"/> 4. Temporary Water Supplies |
| <input type="checkbox"/> 5. Structure Venting System | <input type="checkbox"/> 6. Temporary Evacuation or Relocation of Residents |
| <input type="checkbox"/> 7. Product or NAPL Recovery | <input type="checkbox"/> 8. Fencing and Sign Posting |
| <input type="checkbox"/> 9. Groundwater Treatment Systems | <input type="checkbox"/> 10. Soil Vapor Extraction |
| <input type="checkbox"/> 11. Bioremediation | <input type="checkbox"/> 12. Air Sparging |



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

-

26114

D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☐ 13. Excavation of Contaminated Soils

☐ a. Re-use, Recycling or Treatment

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

ii.a. Receiving Facility: _____ Town: _____ State: _____

ii.b. Receiving Facility: _____ Town: _____ State: _____

iii. Describe: _____

☐ b. Store

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

ii.a. Receiving Facility: _____ Town: _____ State: _____

ii.b. Receiving Facility: _____ Town: _____ State: _____

☐ c. Landfill

☐ i. Cover Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

☐ ii. Disposal Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

☐ 14. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

☐ 15. Removal of Other Contaminated Media:

a. Specify Type and Volume: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

☐ 16. Other Response Actions:

Describe: _____

☐ 17. Use of Innovative Technologies:

Describe: _____



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM**

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

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26114

E. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that an **Immediate Response Action Plan** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Imminent Hazard Evaluation** is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and the assessment activity(ies) undertaken to support this Imminent Hazard Evaluation comply(ies) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

> if Section B of this form indicates that an **Immediate Response Action Status Report** and/or a **Remedial Monitoring Report** is(are) being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Immediate Response Action Completion Statement** or a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 9719

2. First Name: ILEEN S

3. Last Name: GLADSTONE

4. Telephone: 7817214012

5. Ext.:

6. FAX:

7. Signature:

8. Date:

(mm/dd/yyyy)

9. LSP Stamp:



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

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26114

F. PERSON UNDERTAKING IRA:

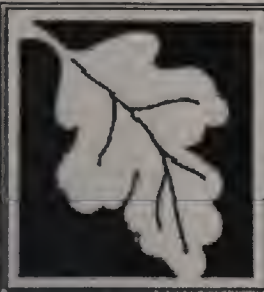
1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions
2. Name of Organization: **UNIFIRST CORP**
3. Contact First Name: **BRIAN** 4. Last Name: **KEEGAN**
5. Street: **68 JONSPIN RD** 6. Title: **ENV ENG MANAGER**
7. City/Town: **WILMINGTON** 8. State: **MA** 9. ZIP Code: **01887-0000**
10. Telephone: **8003477888** 11. Ext.: 12. FAX:

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA:

- ☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
- ☒ e. Other RP or PRP Specify: **PRP GENERIC OR NON-SPECIFIED**
- ☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- ☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- ☐ 4. Any Other Person Undertaking IRA Specify Relationship:

H. REQUIRED ATTACHMENT AND SUBMITTALS:

- ☐ 1. Check here if any Remediation Waste, generated as a result of this IRA, will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement. If this box is checked, you must submit one of the following plans, along with the appropriate transmittal form.
- ☐ a. A Release Abatement Measure (RAM) Plan (BWSC106) ☐ b. Phase IV Remedy Implementation Plan (BWSC108)
- ☐ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- ☒ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the implementation of an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.
- ☐ 4. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the submittal of a Completion Statement for an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.
- ☐ 5. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to the DEP Regional Office.
- ☒ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM**

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

-

26114

I. CERTIFICATION OF PERSON UNDERTAKING IRA:

1. I, **BRIAN KEEGAN**, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: 
Signature

3. Title: **ENV ENG MANAGER**

4. For: **UNIFIRST CORP**
(Name of person or entity recorded in Section F)

5. Date: 
(mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

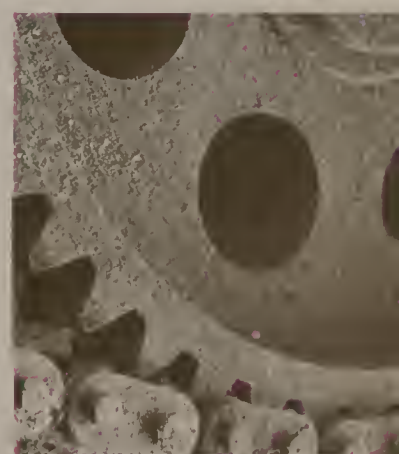
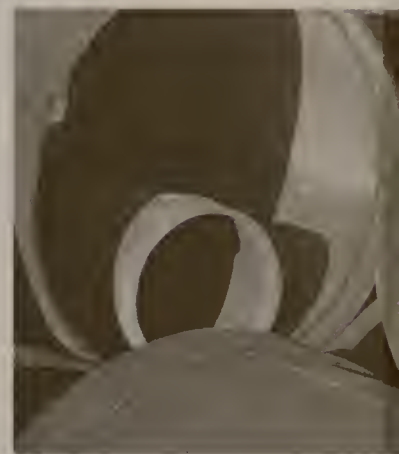
YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

**Received by DEP on
11/13/2006 3:00:43 PM**



Geotechnical
Environmental and
Water Resources
Engineering



ATTACHMENT B

Copies of Public Notification Letters



November 13, 2006
Project 04516-0

Geotechnical
Environmental and
Water Resources
Engineering

Mayor Joseph A. Curtatone
Somerville City Hall
93 Highland Avenue
Somerville, MA 02143

Dear Mayor Curtatone:

**Re: Immediate Responses Action
50 Tufts Street
Somerville, MA
DEP RTN 3-26114**

GEI Consultants, Inc. has been working on behalf of the UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, to investigate and otherwise respond to a release of chlorinated volatile organic compounds (VOCs) at 50 Tufts Street in Somerville, Massachusetts (the Property). The Massachusetts Department of Environmental Protection (DEP) has been overseeing our work, and we have been in regular communication with Mr. Vithal Deshpande, the City of Somerville Environmental Coordinator, concerning the work. The Property is located in a residential and commercial neighborhood in East Somerville. DEP assigned the release a Release Tracking Number (RTN 3-23246) when it was first reported.

Since March 2006, we have been collecting quarterly indoor air samples at 23 and 27 Tufts Street as part of the Immediate Response Action (IRA) associated with RTN 3-23246. Concentrations of tetrachloroethylene (also called perchloroethylene [PCE]) detected in indoor air collected in June 2006 were significantly higher than previously measured by GEI and DEP. On August 1, 2006, UniFirst notified Mr. Kyle MacAfee at DEP that, if these anomalously high concentrations were to persist, they may pose a potential "Imminent Hazard" (IH) condition, as that term is used in the Massachusetts Contingency Plan (MCP). At that time, UniFirst and DEP agreed that additional testing should be conducted in the two homes to evaluate the potential IH condition. DEP assigned a new RTN, RTN 3-26114, to the potential IH condition.

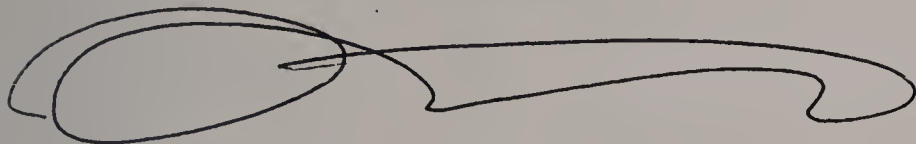
PCE concentrations measured in indoor air samples collected from 23 and 27 Tufts Street in August 2006 were significantly lower, and were in line with results from prior indoor air sampling in those and nearby homes. UniFirst's risk assessors, AMEC Earth & Environmental of Westford, Massachusetts (AMEC), believes that an IH condition does not exist at 23 or 27 Tufts Street. However, DEP has directed UniFirst to follow the MCP procedures for responding to and providing notifications concerning an IH condition. Although we do not agree that such procedures are applicable, UniFirst and GEI are continuing to work cooperatively with DEP, and, while disputing DEP's determination, we are providing you with this notification under the MCP (310 CMR 40.1403).

GEI has installed an AllerAir 5000 Vocab air purifier, which is designed to remove VOCs, at 23 and 27 Tufts Street. The units were installed as a temporary mitigative measure immediately after another round of indoor air sampling was conducted in each home. DEP verbally approved these measures, and we filed an IRA Plan Modification under RTN 3-23246 before the measures were undertaken. We also notified Mr. Deshpande on September 19, 2006 of our plan to install the air purifiers.

If you have any questions, please contact me at 781.721.4012 or igladstone@geiconsultants.com.

Very truly yours,

GEI CONSULTANTS, INC.

A handwritten signature in dark ink, appearing to read 'Ileen S. Gladstone', with a large, stylized loop at the end.

Ileen S. Gladstone, P.E., LSP
Vice President

ISG/LAL:jah

Attachment(s)

c: Massachusetts DEP - Northeast Regional Office
Vithal Deshpande, Somerville DPW
Brian Keegan, UniFirst Corporation

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November 13, 2006
Project 04516-2

Geotechnical
Environmental and
Water Resources
Engineering

Ms. Noreen Burke
City Hall Annex - Health Department
50 Evergreen Avenue
Somerville, MA 02143

Dear Ms. Burke:

**Re: Immediate Responses Action
50 Tufts Street
Somerville, MA
DEP RTN 3-26114**

GEI Consultants, Inc. has been working on behalf of the UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, to investigate and otherwise respond to a release of chlorinated volatile organic compounds (VOCs) at 50 Tufts Street in Somerville, Massachusetts (the Property). The Massachusetts Department of Environmental Protection (DEP) has been overseeing our work, and we have been in regular communication with Mr. Vithal Deshpande, the City of Somerville Environmental Coordinator, concerning the work. The Property is located in a residential and commercial neighborhood in East Somerville. DEP assigned the release a Release Tracking Number (RTN 3-23246) when it was first reported.

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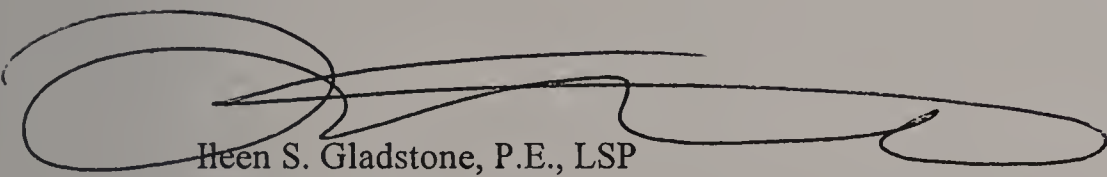
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If you have any questions, please contact me at 781.721.4012 or igladstone@geiconsultants.com.

Very truly yours,

GEI CONSULTANTS, INC.



Heen S. Gladstone, P.E., LSP
Vice President

ISG/MCE:jah
Attachment(s)

c: Massachusetts DEP - Northeast Regional Office
Vithal Deshpande, City of Somerville
Brian Keegan, UniFirst Corporation

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Geotechnical
Environmental and
Water Resources
Engineering

www.geiconsultants.com